

WHAT IS CLAIMED IS:

1. An integrated circuit for an optical encoder, comprising:

a signal processing section for generating a position
5 detection signal from a detection signal of a light receiving
element;

a belt-like power source potential layer formed at least
between the signal processing section and the light receiving
element, potential of the power source potential layer being
10 pulled up to power source potential; and

a plurality of conductive layers formed at different
heights at locations higher than the power source potential
layer,

wherein a connection line which intersects the power
15 source potential layer above the power source potential layer
for electrically connecting the light receiving element and
the signal processing section is formed by a conductive layer
among the plurality of conductive layers other than the
lowermost layer, in a region immediately above the power
20 source potential layer.

2. The integrated circuit for an optical encoder according
to claim 1, wherein

the width of the power source potential layer in the
25 region where the power source potential layer intersects the
connection line is smaller than the width of the power source
potential layer in the remaining region.

3. An integrated circuit for an optical encoder, comprising:

a group of lower conductive layers including a lower conductive layer connected to each of light receiving elements belonging to a first group of light receiving elements and a
5 lower conductive layer connected to each of light receiving elements belonging to a second group of light receiving elements, the lower conductive layers being alternately disposed in parallel to each other;

two upper conductive layers disposed in parallel to each
10 other at locations higher than the lower conductive layers, and which are provided corresponding to the two groups of light receiving elements, respectively, each upper conductive layer including a first region extending in the direction intersecting the extending direction of the lower conductive
15 layers and a second region extending along the extending direction of the lower conductive layers;

a plurality of through holes connecting the lower conductive layers corresponding to each group of light receiving elements with the corresponding first region of the
20 upper conductive layer; and

a power source potential layer provided in an even lower place than the lower conductive layers, the power source potential layer extending in the direction which intersects the extending direction of the lower conductive layers and
25 crossing the second region of the upper conductive layer under the second region of the upper conductive layer, without crossing the lower conductive layers.

4. The integrated circuit for an optical encoder according to claim 3, wherein

the width of the power source potential layer in the portion crossing the second region of the upper conductive layer under the second region of the upper conductive layer is smaller than the width of the power source potential layer in the remaining portion.